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FILE COVERS 1907 - 3 Feb 2003  VOL 138 ISS 6
FILE LAST UPDATED: 2 Feb 2003  (20030202/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


=> s solution(l)polyketone
        215375 SOLUTION
        251931 SOLUTIONS
        455484 SOLUTION
                 (SOLUTION OR SOLUTIONS)
       1964549 SOLN
        918463 SOLNS
       2487804 SOLN
                 (SOLN OR SOLNS)
       2589808 SOLUTION
                 (SOLUTION OR SOLN)
         10724 POLYKETONE
         11228 POLYKETONES
         11775 POLYKETONE
                 (POLYKETONE OR POLYKETONES)
L1         355 SOLUTION(L)POLYKETONE

=> s copolymer(l)carbon monoxide
        486714 COPOLYMER
        166651 COPOLYMERS
        531803 COPOLYMER
                 (COPOLYMER OR COPOLYMERS)
        953535 CARBON
         21629 CARBONS
        961808 CARBON
                 (CARBON OR CARBONS)
        142687 MONOXIDE
           923 MONOXIDES
        143180 MONOXIDE
                 (MONOXIDE OR MONOXIDES)
        119549 CARBON MONOXIDE
                 (CARBON(W)MONOXIDE)
L2        2000 COPOLYMER(L)CARBON MONOXIDE

=> s olefins
L3       86056 OLEFINS
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=> s zinc salts or calcium salts or iron salts or thiocyanates
         462030 ZINC
             92 ZINCS
         462058 ZINC
                (ZINC OR ZINCS)
         518835 SALTS
           5627 ZINC SALTS
                (ZINC(W)SALTS)
         617290 CALCIUM
             31 CALCIUMS
         617295 CALCIUM
                (CALCIUM OR CALCIUMS)
         518835 SALTS
           7059 CALCIUM SALTS
                (CALCIUM(W)SALTS)
         790242 IRON
          10752 IRONS
         791449 IRON
                (IRON OR IRONS)
         518835 SALTS
           3545 IRON SALTS
                (IRON(W)SALTS)
           6785 THIOCYANATES
L4        21849 ZINC SALTS OR CALCIUM SALTS OR IRON SALTS OR THIOCYANATES

=> d his

     (FILE 'HOME' ENTERED AT 08:21:25 ON 03 FEB 2003)

     FILE 'CAPLUS' ENTERED AT 08:24:51 ON 03 FEB 2003
L1           355 S SOLUTION(L)POLYKETONE
L2          2000 S COPOLYMER(L)CARBON MONOXIDE
L3         86056 S OLEFINS
L4         21849 S ZINC SALTS OR CALCIUM SALTS OR IRON SALTS OR THIOCYANATES

=> s l2 and l3 and l4
L5             0 L2 AND L3 AND L4

=> s l1 and l2 and l3
L6             7 L1 AND L2 AND L3

=> s l1 and l4
L7             5 L1 AND L4

=> d l6 1-7 bib,abs

L6   ANSWER 1 OF 7  CAPLUS  COPYRIGHT 2003 ACS
AN   2002:570338  CAPLUS
DN   137:109652
TI   Manufacture of high-purity polyalcohols
IN   Hashizume, Kiyoshige; Matsumura, Shunichi
PA   Teijin Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 6 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.         KIND  DATE           APPLICATION NO.  DATE
     ---------------    ----  --------       ---------------  --------
PI   JP 2002212282       A2   20020731       JP 2001-6117     20010115
PRAI JP 2001-6117              20010115
AB   The polyalcs. are manufd. by hydrogenation of polyketones prepd.
     from CO and olefins in the presence of homogeneous metal
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catalysts in solvents, followed by treating the resulting hydrogenated product **solns**. with nonpolar solvents to remove catalysts. Thus, hydrogenation of CO-ethylene copolymer in the presence of tris(acetylacetonato)ruthenium, phenylphosphonic acid, and tributylphosphine in a sulfolane-water mixt., and removal of catalysts by treating with PhMe gave a polyalc. contg. 8 ppm Ru.

L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 2002:198572 CAPLUS
DN 136:370050
TI Aqueous polyketone latices prepared with water-insoluble palladium(II) catalysts
AU Held, Anke; Kolb, Ludmila; Zuideveld, Martin A.; Thomann, Ralf; Mecking, Stefan; Schmid, Markus; Pietruschka, Raimund; Lindner, Ekkehard; Khanfar, Monther; Sunjuk, Mahmoud
CS Institut fuer Makromolekulare Chemie und Freiburger Materialforschungszentrum, Albert-Ludwigs-Universitaet Freiburg, Freiburg, D-79104, Germany
SO Macromolecules (2002), 35(9), 3342-3347
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB Alternating copolymn. of **carbon monoxide** with ethylene or 1-**olefins** in aq. emulsion by water-insol. palladium(II) complexes is reported. Latexes of aliph. **polyketones** (1-olefin/CO **copolymers** and ethylene/10-undecenoic acid/CO terpolymers), prepd. by catalytic polymn., are described for the first time. An in-situ catalyst system [{R2P(CH2)3PR2}Pd(OAc)2]/ strong acid (R = Ph or (CH2)13Me) or well defined complexes [{Ph2P(CH2)3PPh2}PdMe(NCMe)]+ Y- (Y- = [B[3,5-(F3C)2C6H3]4]- or SbF6-) were used in the form of a **soln**. of the palladium(II) complex in miniemulsion droplets of a hydrocarbon dispersed in the continuous aq. phase. Catalyst activities of up to 5 .times. 103 TO h-1 slightly exceed those of nonaq. polymns. in methanol with the same catalysts. Polymer mol. wts. (GPC vs PMMA stds.) are typically Mw 2 .times. 105 (ethylene **copolymers**) or Mw 2 .times. 104 (1-olefin **copolymers**) with Mw/Mn 2-4. The 1-olefin **copolymers** exhibit glass transition temps. of Tg = +10 to -55.degree.C, which is in the range desirable for latex applications.
RE.CNT 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 2001:165741 CAPLUS
DN 134:223166
TI Production of olefin-**carbon monoxide** **copolymers** in supercritical fluid solution or suspension
IN Queisser, Joachim; Hildebrandt, Volker; Lindner, Ekkehard; Schmid, Markus; Wald, Joachim; Wegner, Peter
PA BASF A.-G., Germany
SO Ger. Offen., 18 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19941244	A1	20010308	DE 1999-19941244	19990831
	WO 2001016212	A2	20010308	WO 2000-EP8219	20000823
	W: JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	DE 1999-19941244	A	19990831		

OS MARPAT 134:223166

AB Aliph. **polyketones** are produced from CO and .gtoreq.1 C2-20-olefin(s) in the presence of a metal complex catalyst with 2 to 20 carbon atoms in the presence of a metal complex polymn. catalyst in a supercrit. **soln**. or suspension medium such as CO2. The CO2 is readily sepd. from the product, in contrast to prior-art alcs. used as polymn. media. The prodn. of CO-ethylene and CO-ethylene-1-hexene alternating copolymers in the presence of Pd catalysts was exemplified.

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 1994:77912 CAPLUS
DN 120:77912
TI Catalyst for synthesis of a polyketone
IN Kershner, David L.
PA AKZO N. V., Neth.
SO U.S., 3 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5242878	A	19930907	US 1992-865413	19920408
WO 9320938	A1	19931028	WO 1993-US3147	19930402
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI US 1992-865413		19920408		

AB **Polyketones** are formed from CO and .gtoreq.1 olefin by using a catalyst which comprises a Group VIII metal, an anion of an acid having pKa <4, and a tin tetradentate phosphine ligand, preferably Sn(CH2PPh2)4. Adding SnCl4 to TMEDA-LiCH2PPh2 complex in THF, stirring for 18 h, and refluxing 3 h gave 58% white solid Sn(CH2PPh2)4. Mixing Pd(OAc)2 0.045, Sn(CH2PPh2)4 0.19, and p-TsOH 0.106 g in 20 mL acetone, stripping off the volatiles in vacuo, dissolving the orange residue in 500 mL acetone, autoclaving the **soln**. with 1000 psi 1:1 CO:ethylene gas, and heating at 65.degree. for 18 h gave a **polyketone** with catalyst activity 66 g polymer/g Pd.

L6 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 1991:656988 CAPLUS
DN 115:256988
TI Preparation of polyketones
IN Geuze, Maarten Martinus; Petrus, Leonardus; Salter, James Arthur; De Smedt, Philip Jean Marie Maurice
PA Shell Internationale Research Maatschappij B. V., Neth.
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 448177	A2	19910925	EP 1991-200625	19910320
EP 448177	A3	19920325		
EP 448177	B1	19951227		
R: BE, DE, ES, FR, GB, IT, NL				
US 5122591	A	19920616	US 1991-668848	19910313
FI 9101357	A	19910923	FI 1991-1357	19910320
CA 2038654	AA	19910923	CA 1991-2038654	19910320
CN 1054990	A	19911002	CN 1991-101711	19910320
CN 1031136	B	19960228		
AU 9173698	A1	19911003	AU 1991-73698	19910320
AU 637888	B2	19930610		
BR 9101083	A	19911105	BR 1991-1083	19910320
ZA 9102061	A	19911127	ZA 1991-2061	19910320

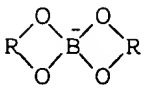
	HU 57242	A2	19911128	HU 1991-933	19910320
	HU 210081	B	19950228		
	JP 04222830	A2	19920812	JP 1991-57169	19910320
	RU 2021288	C1	19941015	RU 1991-4894989	19910320
	PL 167050	B1	19950731	PL 1991-289509	19910320
	CZ 280546	B6	19960214	CZ 1991-751	19910320
	ES 2081421	T3	19960301	ES 1991-200625	19910320
PRAI	NL 1990-677		19900322		

AB **Polyketones** with high bulk d. are continuously prepd. by polymg. CO with **olefins** which are fed to the reactor at steady state flow rates. The start-up is performed by feeding the catalysts at a lower flow rate and/or feeding the diluents at a higher flow rate. Thus, feeding 61 kg MeOH and a 25:55:20 (molar) CO-C2H4-C3H6 mixt. into a reactor, feeding MeOH at 5 kg/h, **soln**. A [contg. 1000 mg Pd acetate 1000, 1,3-bis[bis(2-methoxyphenyl)phosphino]propane 2491, and CF3COOH 1067 mg in 1 L acetone] at 6.33 mL/h and **soln**. B (contg. 3000 mg CF3COOH in 1 L acetone) at 4.18 mL/h, and polymg. gave **polyketones** with bulk d. 80 kg/m3 at run-hour 48. The bulk d. of polymers increased to 200 kg/m3 at run-hour 188 with the increase of feed rates of **soln**. A and B to 25.32 and 17.32 mL/h, resp., at run-hour 137.

L6 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 1991:144246 CAPLUS
DN 114:144246
TI Process for preparing polyketones from **olefins** and carbon monoxide
IN Smith, Kevin Gerald
PA British Petroleum Co. PLC, UK
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 396268	A1	19901107	EP 1990-303957	19900411
	R: BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
	US 5034507	A	19910723	US 1990-508184	19900412
	CA 2015125	AA	19901026	CA 1990-2015125	19900423
	JP 03017127	A2	19910125	JP 1990-105508	19900423
	AU 9053809	A1	19901101	AU 1990-53809	19900424
	NO 9001832	A	19901029	NO 1990-1832	19900425
PRAI	GB 1989-9476		19890426		

OS MARPAT 114:144246
GI



I

AB The title process features the use of a Pd catalyst prepd. by reacting together (A) a source of Pd, (B) a bidentate amine, phosphine, arsine, or stibine, and (C) a source of anion I (R = C1-6 alkylene, o-phenylene or biphenylene groups or C6H4CO and derivs.; and the presence of a quinone, e.g. benzoquinone. Charging to an autoclave 1.60 g borosalicylic acid, 0.25 g p-benzoquinone, and 70 mL MeOH, adding 28.11 C3H6 and 10 bar 1.1 mixt. of C2H4/CO,. introducing a catalyst **soln**. of 25 mg Pd(OAc), and 66 mg bis(diphenylphosphino)propane in 10 mL MeOH, and polymg. gave 7.59 **polyketone**.

L6 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS
AN 1990:460077 CAPLUS
DN 113:60077
TI Preparation of storage-stable catalyst solution for polymerization carbonmonoxide with **olefins**
IN Van Broekhoven, Johannes Adrianus; Miedema, Wiebren
PA Shell Internationale Research Maatschappij B. V., Neth.
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 360359	A1	19900328	EP 1989-202390	19890921
	EP 360359	B1	19930414		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	US 5010171	A	19910423	US 1989-408012	19890915
	AU 8941590	A1	19900329	AU 1989-41590	19890920
	AU 612896	B2	19910718		
	JP 02115224	A2	19900427	JP 1989-244880	19890920
	JP 2846898	B2	19990113		
	BR 8904723	A	19900501	BR 1989-4723	19890920
	ZA 8907172	A	19900627	ZA 1989-7172	19890920
	AT 88201	E	19930415	AT 1989-202390	19890921
	ES 2055013	T3	19940816	ES 1989-202390	19890921
PRAI	NL 1988-2347		19880922		
	EP 1989-202390		19890921		

OS MARPAT 113:60077
AB The title soln. is prepd. by combining a Pd salt of a monocarboxylic acid and a bisphosphine(R1)2PZP(R1)2 (Z = C>2 divalent group; R1 = aryl group contg. .gtoreq.1 alkoxy group ortho to the P) in an aprotic polar solvent, then mixing with halomonocarboxylic acid (pKa < 2). Thus, a catalyst soln. was prepd. by adding, under N, 1,3-bis[bis(2-methoxyphenyl)phosphino]propane (I) 0.12, Pd(OAc)2 0.1, and F3CCO2H 2 mmol to 60 mL AcMe. CO-C2H4-C3H6 copolymers prepd. using the above catalyst soln. when fresh and aged 30 days had limiting viscosity no. 2.1 and 2.3 dL/g, resp., vs. 2.2 and 1.1, resp. for a catalyst soln. prepd. using a soln. of I in PhMe.

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(FILE 'HOME' ENTERED AT 08:21:25 ON 03 FEB 2003)

FILE 'CAPLUS' ENTERED AT 08:24:51 ON 03 FEB 2003
L1 355 S SOLUTION(L)POLYKETONE
L2 2000 S COPOLYMER(L)CARBON MONOXIDE
L3 86056 S OLEFINS
L4 21849 S ZINC SALTS OR CALCIUM SALTS OR IRON SALTS OR THIOCYANATES
L5 0 S L2 AND L3 AND L4
L6 7 S L1 AND L2 AND L3
L7 5 S L1 AND L4

=> d l7 1-5 bib,abs

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 2001:767538 CAPLUS
DN 135:319050
TI **Polyketone solution** with freedom from coagulation and method for manufacture
IN Morita, Toru; Kato, Jinichiro
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001294668	A2	20011023	JP 2000-110086	20000412
PRAI JP 2000-110086		20000412		

AB The **soln**. is obtained by dispersing a **polyketone** in an aq. **soln**. contg. 0.01-59% Zn salts, Ca salts, thiocyanate salts or/and Fe salts, then removing the water from the resulting dispersion to a salt concn. of 60-90%.

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 2001:288901 CAPLUS
DN 134:312390
TI **Polyketone solution** and manufacture of **polyketone** fibers
IN Morita, Toru; Kato, Jinichiro
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001115007	A2	20010424	JP 1999-293928	19991015
PRAI JP 1999-293928		19991015		

AB A **polyketone soln**. for manuf. of high-strength and highly elastic **polyketone** fibers by gel spinning comprises a **polyketone**, prepd. from an olefin and carbon monoxide, and an aq. **soln**. contg. a compd. selected **zinc salts**, **calcium salts**, thiocyanic acid salts, and **iron salts**. The **soln**. has a phase sepn. temp. in the range of 0-250.degree.. **Polyketone** fibers are obtained by extruding the **polyketone soln**. at a temp. below the phase sepn. temp. to give fiber shaped products and then removing a part or entire solvent and stretching to obtain fibers.

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 2000:905650 CAPLUS
DN 134:57908
TI **Polyketone** dopes dissolved in aqueous salt **solution** solvents, fibers prepared from them, and simple manufacture of the fibers by wet spinning
IN Morita, Toru; Kato, Jinichiro
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000355825	A2	20001226	JP 1999-167370	19990614
PRAI JP 1999-167370		19990614		

AB **Polyketones** contg. .gtoreq.90% CO-olefin alternating copolymer units are dissolved in aq. CaBr2, CaI2, thiocyanate salts, FeCl3, and/or FeBr3 **solns**. The fibers are manufd. by extruding **polyketone** dopes through a spinning nozzle, removing solvents from them, and stretching them at 0-300.degree.. Thus, 10% dope of CO-ethylene alternating copolymers dissolved in 75% aq. CaBr2 **soln**. without decompn. was extruded through a spinning nozzle into 10% aq. CaBr2

soln., washed, and stretched 6-fold at 240.degree. to give a fiber with elongation (JIS L 1013) 10%.

L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 2000:697469 CAPLUS
DN 133:268170
TI Polyketone fibers with high modulus and improved dimensional stability and heat resistance at high temperatures and manufacture thereof
IN Taniguchi, Toru; Morita, Toru
PA Asahi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000273720	A2	20001003	JP 1999-77220	19990323
PRAI JP 1999-77220		19990323		

AB The fibers exhibit min. storage modulus (E') at 50-150.degree. as detd. by the dynamic viscoelastic measurement at 110 Hz or the fibers exhibit E' at 180.degree. and 110 Hz .gtoreq.80 g/denier and shrinkage at 180.degree. .ltoreq.4%, and the fibers consist of **polyketones** or **polyketones** comprising carbon monoxide-olefin copolymers (A) or polymers contg. .gtoreq.90% A units or **polyketones** showing intrinsic viscosity (.eta.) .gtoreq.0.3. The fibers are prepd. by spinning dopes contg. **polyketones** in aq. **solns**. contg. .gtoreq.50% **zinc salts** or ZnCl2 or zinc complex salts with metals other than Zn, removing the solvents from the fibers, and drawing the fibers at a temp. (T) from 150.degree. to m.p. of the fibers and drawing stress (.sigma.) .gtoreq.(2.25-0.005T) g/denier. The fibers are useful for tire cords (no data). A dope contg. carbon monoxide-ethylene copolymer with .eta. (in m-cresol, at 60.degree.) 4.6 in an aq. **soln**. contg. 75% ZnCl2 was spun into an aq. coagulating bath at 10.degree., washed, wound at 5.6 m/min, dried, drawn to draw ratio 2.3 at 240.degree., subsequently drawn to draw ratio 2.3 at 240.degree. and .sigma. 1.6 g/denier to give fibers with tenacity 10.2 g/denier and elongation 4.5% and showing min. E' at 95.degree. and exhibiting E' at 180.degree. 120 g/denier and shrinkage (JIS L-1013) at 180.degree. 2.1%.

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 1999:471869 CAPLUS
DN 131:103038
TI **Polyketone solutions** containing **zinc salts**
IN Ash, Carlton Edwin
PA Shell Oil Co., USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5929150	A	19990727	US 1998-128830	19980804
PRAI US 1997-61157P	P	19971006		

AB A polymer **soln**. comprises a **polyketone** in the presence of a **soln**. of ZnX2 under dissoln. conditions wherein X is selected from chlorine, bromine, and iodine. The solvents completely dissolve **polyketone** when aq. or org. **solns**. are made from particular concns.
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	53.45	54.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.81	-7.81

STN INTERNATIONAL LOGOFF AT 08:27:59 ON 03 FEB 2003